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EXAMINER

HARLE, JENNIFER I

ART UNIT PAPER NUMBER

3627

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,471

Applicant(s)

DIMITROVA ET AL.

Examiner

Jennifer I. Harle

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ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claims 1-39 are pending. The examiner notes for the record that there are multiple documents incorporated by reference into the specification that have not been provided for review by the examiner. The examiner respectfully requests that these documents be provided as they are considered to be admitted prior art and a part of the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21, 26-27, 29-6 and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Elenbaas, et al. (WO 00/39707).

Elenbaas discloses an information tracker (Abstract, Description of Related Art) that contains a content analyzer with a memory that stores content data received from information sources (video signals, cable and satellite television, audio and radio) and a set of machine-readable instructions for analyzing the content data according to query criteria (Figs. 1-2 and pp. 2-11 and 16-17); an input device communicatively connected to the content analyzer that permits a user to interact with the content analyzer (Figs. 3-4; pp. 9-16); and a display device communicatively connected to the content analyzer for displaying a result of analysis of the content data performed by the content analyzer (Figs. 3-4; pp. 9-16); wherein, according to the set of machine-readable instructions, the processor of the content analyzer analyzes the content data to extract and index one or more stories related to the query criteria (Fig.1; pp. 4-11) and

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wherein, the processor of the content analyzer uses the query criteria to spot a subject in the content data, extract one or more stories from the content data, resolve the inference names in the extracted one or more stories, and display a link to the extracted one or more stories on the display device (pp. 9-13) and wherein, in addition to displaying the link to the extracted one or more stories, the content information about the subject to display one or more links to a shopping web-site, such that the user can purchase goods related to the subject (pg. 16, lines 27-30 and 3-6 – presentation of information from sources including the Internet and World Wide Web where the association between sets of key frames and story segments may be via embedded HTML commands containing web site addresses, and the retrieval of a selected story segment is via the selection of a corresponding web site – classification system may be very large and versatile for a variety of users and different models of retrieval systems, each having different levels of complexity and cost are provided to the users for retrieving selected story segments).

Elenbaas discloses that the names in the extracted stories are resolved and inferenced using ontology (pp. 7-8).

Elenbaas discloses that if more than one store is extracted the processor indexes the stories according to name, topic and keyword (pp. 6-10).

Elenbaas discloses that the stories are further ordered based on causality relationship and/or temporal relationship and/or alphabetically (pp. 7-10).

Elenbaas discloses that the query criteria includes a request input by the user through the input device and the processor analyzes the content data according to the request and a user profile, which includes information about the user's interests, i.e. preferences, which can be

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updated by integrating information in the request with existing information in the user profile (pp. 9-13).

Elenbaas discloses that the content analyzer comprises a knowledge base, which includes a plurality of known relationships, and the processor analyzes the content data according to the knowledge base, i.e. expert systems, learning systems, etc. (pp. 9-10).

Elenbaas discloses that the known relationships include maps of a known face and voice to a name and a name to related information (pp. 6-10).

Claim 15 is rejected for the same reasons set forth above in claims 9, and 12-13.

Elenbaas discloses a person spotting function that matches known faces to extracted faces, known voices to extracted voices, scans the extracted text to match known names and calculates a probability of a particular person being present, i.e. utilizes the characterizer (pp. 5-9).

As per claims 17-19 the content data is disclosed to be a video signal and the information source is disclosed to be a television provider, i.e. a satellite provider or any other broadcast form or media used to communicate video stream, including point to point communications, which would implicitly include cable, broadcast, etc. (pp. 4).

Method claims 28-36 and 38 are rejected for the same reasons set forth above.

Elenbaas discloses that indexing occurs according to predetermined criteria, extracting a causality relationship, and extracting a temporal relationship, calculating a rating for each of the extracted stories from one or more characteristics of the extracted stories and prioritizing the extracted stories (pp. 14-16 and 6-10).

Elenbaas discloses creating a hyperlinked index (pp. 16).

Elenbaas discloses that the content analyzer is centrally located and the user access the content analyzer via a communications network (pp. 14-17).

Information tracing retrieval system claim 39 is rejected for the reasons set forth above.

Claims 1-21, 26-27, 29-6 and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Wactlar, et al. (5,835,667).

Wactlar discloses an information tracker (Abstract, Fig. 1; cols. 4-5, lines 30-35) that contains a content analyzer with a memory that stores content data received from information sources (video signals, cable and satellite television, audio and radio)¹ and a set of machine-readable instructions for analyzing the content data according to query criteria (Figs. 1-2 and cols. 4-7 and 11-12); an input device communicatively connected to the content analyzer that permits a user to interact with the content analyzer (Figs. 4-5; cols. 11-15); and a display device communicatively connected to the content analyzer for displaying a result of analysis of the content data performed by the content analyzer (Figs. 4-6; cols. 17-18); wherein, according to the set of machine-readable instructions, the processor of the content analyzer analyzes the content data to extract and index one or more stories related to the query criteria (Figs. 1-2.; cols. 4-7) and wherein, the processor of the content analyzer uses the query criteria to spot a subject in the content data, extract one or more stories from the content data, resolve the inference names in the extracted one or more stories, and display a link to the extracted one or more stories on the display device (Figs. 1-2; col. 9, cols. 17-18) and wherein, in addition to displaying the link to the extracted one or more stories, the content information about the subject to display one or

¹ Wactlar discloses that the video data comes from television (see Fig. 1). However, television is generic for all the different mechanisms by which the signals can now be sent to users, i.e. regular broadcasting, cable (early 1980s), satellite (1990s). See, e.g. Broadcasting, Radio and Television, Encarta, <http://encarta.msn.com>, 1997-2004.

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more links to a shopping web-site, such that the user can purchase goods related to the subject (Figs. 1-2; col. 9. cols. 17-18 – sale to users).

Wactlar discloses that the names in the extracted stories are resolved and inferenced using ontology (cols. 4-5, col.. 7 and col. 9).

Wactlar discloses that if more that one store is extracted the processor indexes the stories according to name, topic and keyword (cols. 4-5, and 7-11).

Wactlar discloses that the stories are further ordered based on causality relationship and/or temporal relation ship and/or alphabetically (cols. 7-11).

Wactlar discloses that the query criteria includes a request input by the user through the input device and the processor analyzes the content data according to the request and a user profile, which includes information about the user's interests, which can be updated by integrating information in the request with existing information in the user profile (cols. 14-15 and 17-183).

Wactlar discloses that the content analyzer comprises a knowledge base, which includes a plurality of known relationships, and the processor analyzes the content data according to the knowledge base. (cols. 4-5).

Wactlar discloses that the known relationships include maps of a known face and voice to a name and a name to related information (Fig. 6; cols. 11-13, cols. 17-18 – Find video with same person – maps known face and voice to name and related information thus increasing reliability).

Claim 15 is rejected for the same reasons set forth above in claims 9, and 12-13.

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Wactlar discloses a person spotting function that matches known faces to extracted faces, known voices to extracted voices, scans the extracted text to match known names and calculates a probability of a particular person being present (Fig.6; cols. 11-13, cols. 17-18).

Wactlar discloses that the content analyzer is communicatively connected to a second information source for providing access to additional content data, the additional content data being analyzed for relevant stories (Fig. 1 – Extra Footage, New Video Footage; col. 6 – it is preferable that the raw video material incorporates not only television footage but also the unedited source materials, shown generally as extra footage – raw material could also include pure text, audio only or video only).

Method claims 28-36 and 38 are rejected for the same reasons set forth above.

Wactlar discloses that indexing occurs according to predetermined criteria, extracting a causality relationship, and extracting a temporal relationship, calculating a rating for each of the extracted stories from one or more characteristics of the extracted stories and prioritizing the extracted stories (cols. 4-5, cols. 7-11).

Wactlar discloses creating a hyperlinked index (cols. 4-5 and throughout – discloses that the system is utilized on-line and on the Internet and thus would be hyperlinked).

Wactlar discloses that the content analyzer is centrally located and the user access the content analyzer via a communications network (cols. 4-5 and throughout – discloses that the system is on-line and on the Internet).

Information tracing retrieval system claim 39 is rejected for the reasons set forth above.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elenbaas, et al. (W0 00/39707).

Elenbaas discloses as set forth above. The examiner directs attention to the fact that Elenbaas further discloses that the system is utilized with video broadcasts that contain an audio signal and that these signals are utilized in the classification process and that it can be utilized for classification from sources including the Internet and the World Wide Web, which contain radio signals, i.e. Real Player, as well. Thus, the substitution/utilization of an audio signal for content data and a radio station as the information source would have been obvious to one of ordinary skill in the art at the time of the invention as it is irrelevant whether the content data/information source is that of a radio or television provider as each is a standard for providing part of the ever increasing supply of information and entertainment options in the broadcast media, even as set forth in the background of the Description of Related Art (pp. 1-2) in the multimedia venues and would have provided the same types of information to the content analyzer of claim 1.

Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elenbaas, et al. (W0 00/39707) and/or Wactlar, et al. (5,835,667) in view of Mei Kobayashi and Koichi Takea, Information Retrieval on the Web, AMC Computing Surveys, Vol. 32, No. 2, June 2000, pp. 144-173 and further in view of Carol Tenopir, Online Databases – Trends for the Next Five Years, Library Journal, Vol. 125, No. 16, October 1, 2000, pp. 38 and 40.

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Elenbaas and Wactlar disclose as set forth above. However, neither Elenbaas nor Wactlar (assuming arguendo) specifically disclose that the content analyzer is communicatively connected to a second information source for providing access to additional content data, the additional content data being analyzed for relevant stories. Kobayashi discloses that Dialog, Lexis-Nexis, Yahoo and Altavista are all communicatively coupled via their search engines to databases of images, i.e. a second information source that is analyzed for relevant stories (pp. 164-165). Kobayashi discloses that internet retrieval of multimedia resources in addition to regular web based resources is a potentially lucrative application and that the vast majority of publication support this view and there are many talented scientists working towards implementing more concrete solutions and more efficient and user-friendly solutions (pp. 165-166). Tenopir further teaches that the online industry sees a need and desirability to link and index all types of databases whether text based or multimedia as the demand for information grows and the need to add value to information products and services should be on the mind of any information intermediary, whether from libraries or database companies (pp. 38 and 40). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a content analyzer with a the Internet, whether web site or image or video, to obtain additional stories/content as taught in Kobayashi and Tenopir for the explicit reasons set forth.

Elenbaas and Wactlar disclose as set forth above. However, they do not disclose either a first or second approach or finding intersection/matching stories. The examiner notes that scanning a web site involves using a "robot" Known as a 'spider' or crawler", which feeds data into an index and utilizes software to then sort and rank indexed information and then a query is

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performed by Boolean (keyword), natural language, etc.² However, as set forth above, Kobayashi discloses that Yahoo and Altavista are all communicatively coupled via their search engines to databases of images, i.e. a second information source that is analyzed for relevant stories (pp. 164-165). Kobayashi discloses that internet retrieval of multimedia resources in addition to regular web based resources is a potentially lucrative application and that the vast majority of publication support this view and there are many talented scientists working towards implementing more concrete solutions and more efficient and user-friendly solutions (pp. 165-166). Tenopir further teaches that the online industry sees a need and desirability to link and index all types of databases whether text based or multimedia as the demand for information grows and the need to add value to information products and services should be on the mind of any information intermediary, whether from libraries or database companies (pp. 38 and 40). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a first and second approach as the search engines already utilize both in conjunction with each other as internet portals to obtain the content, whether web site or image or video, to obtain additional stories/content as taught in Kobayashi and Tenopir for the explicit reasons set forth. Further it is inherent that Altavista performs the matching/intersection function is performed. See AltaVista Asserts Search Strength With Web's largest index and Directory, PR Newswire, May 4, 2000, pg. 1 - duplicate and near-duplicates pages are weeded out of the result set, i.e. matching and intersecting stories that are retrieved as a result of both the first and second approaches found in the additional data content are compared and removed.

² See, e.g. Jenny Lyn Bader, Searching for the Search Engines of meaning, The New York Times, November 28, 1999, pg. 4.4; Jeffrey Branzburg, A Beginner's Guide to internet Lingo, Technology and Learning; Vol. 19, No. 7, March 1999, pg. 7; Randy McClain, Snared by the Web? *** Even the CyberSavvy Will Need Patience to Snag Internet Success, Advocate, September 20, 1997, pg. 1.E.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rohini K. Srihari, et al., Intelligent Indexing and Semantic Retrieval of Multimodal Documents, Information Retrieval, Vol. 2 Issue 2-3, May 2000, pp. 245-275 discloses finding useful information from large multimodal document collections such as the web without encountering numerous false positives.

David Green, The Evolution of Web Searching, Online Information Review, Vol. 24, Iss. 2, 2000 pg. 124 discloses the interrelation between web publishing and information retrieval technologies and the implications for indexing and searching web pages.

Chris Sherman, AltaVista introduces Advance Search Center, New Resources, Information Today, May 2000, Vol. 17, No. 5, pg. 16 discloses the ability of Altavista to search video.

Excite@Homw Unveils Excite® Precision Search, PR Newswire, June 19, 2000, pg. 1, discloses the querying ability and relevance results and photo searching abilities.

Zhang Hongjiang, Easier Search for Multimedia Content on Internet, Xinhua News Agency-CEIS, March 2, 2000, discloses a new method for searching for multimedia content.

Maria O'Daniel, Finding Audio and Video Files Online, New Straits Times, October 26, 300, pg. 17 discloses that finding audio/visual materials takes time and effort but is worth it.

Greg R. Notess, Internet Search Engine Update, Online, May/June 2000, Vol. 24, Iss.3, pg. 16 discloses Altavista's multimedia capabilities and Dialog's Webcheck.

Greg R. Notess, *Serching Beyond Text: Multimedia Search Tools*, Online, Nov/Dec 2000, Vol. 24, Iss. 6, pp 63-65 discloses that there are plenty of specialized search tools some of which cover several types of multimedia content.

Altavista.com – homepage,
<http://web.archive.org/web/20000229113411/http://www.altavista.com>, printed April 27, 2004 discloses that there was the ability to search video and images and audio back in February 2000.

In accordance with the USPTO's goals of customer service, compact prosecution, and reduction of cycle time, and because "the continual, chief complaint of inventors and their lawyers: that patent examiners are abysmal communicators, both orally and in writing,"³ the Examiner has made every effort to clarify his position regarding claim interpretation and any rejections or objections in this application. Furthermore, the Examiner has provided Applicant(s) with notice—for due process purposes—of his position regarding his factual determinations and legal conclusions. If Applicant(s) disagree with *any* factual determination or legal conclusion made by the Examiner in this Office Action whether expressly stated or implied,⁴ the Examiner respectfully requests Applicant(s) *in their next response* to expressly traverse the Examiner's position and provide appropriate arguments in support thereof. Failure by Applicant(s) *in their next response* to traverse the Examiner's positions and provide appropriate arguments in support thereof will be considered an admission by Applicant(s) of the factual determinations and legal conclusion not expressly traversed.⁵ By addressing these issues

³ Sabra Chartrand, *A Bid to Overcome Patent Backlogs*, 152 N.Y. Times C2 (Sept. 23, 2002).

⁴ E.g., if the Examiner rejected a claim under §103 with two references, although not directly stated, it is the Examiner's implied position that the references are analogous art.

⁵ See also MPEP §714.02, 37 CFR §1.111(b), and 37 CFR §1.104(c)(3).

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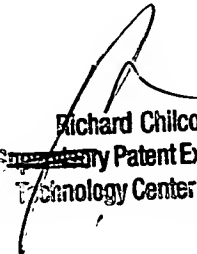
now, matters where the Examiner and Applicant(s) agree can be eliminated allowing the Examiner and Applicant(s) to focus on areas of disagreement (if any) with the goal towards allowance in the shortest possible time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer I. Harle whose telephone number is 703.306.2906. The examiner can normally be reached on Monday through Thursday, 6:30 am to 5:00 pm,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on 703.308.5183. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Ione Harle
April 27, 2004


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